

Offshoring in the Global Economy

Microeconomic Structure and Macroeconomic Implications

Robert C. Feenstra

**The MIT Press
Cambridge, Massachusetts
London, England**

© 2010 Massachusetts Institute of Technology

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher.

MIT Press books may be purchased at special quantity discounts for business or sales promotional use. For information, please email special_sales@mitpress.mit.edu or write to Special Sales Department, The MIT Press, 55 Hayward Street, Cambridge, MA 02142.

This book was set in Palatino by Toppan Best-set Premedia Limited and was printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Feenstra, Robert C.

Offshoring in the global economy: microeconomic structure and macroeconomic implications / Robert C. Feenstra.

p. cm.—(Ohlin lectures)

Includes bibliographical references and index.

ISBN 978-0-262-01383-3 (hardcover : alk. paper)

1. Contracting out. 2. Offshore outsourcing. 3. Wages—Effect of international trade on. I. Title.

HD2365.F44 2010

338.6'3—dc22

2009027343

Preface

Starting in the early 1990s, it was noticed that the wages of low-skilled workers relative to high-skilled workers in the United States had fallen in the previous decade. This observation captured the attention of trade and labor economists alike, leading to a sometimes heated exchange on the role of trade versus technological change in explaining wage movements. That discussion continues today but has changed in form, now focusing on workers in the middle of the wage distribution who appear to have lost ground relative to others.

In lecture 1, I begin with the contrasting views of two trade economists—Paul Krugman and Edward Leamer—since the lessons from their exchange help us understand the most recent literature today. Despite their differences both relied on an underlying Heckscher–Ohlin structure in which countries trade final goods. I will suggest that neither of them could adequately explain the wages movements of the 1980s, and because of that, their debate spawned a new type of trade model focusing on the transfer of production processes across countries: these are models of foreign outsourcing or offshoring. The extent to which these models are really new, or simply a re-casting of Heckscher–Ohlin intuition, serves to frame the discussion.

I review my early work with Gordon Hanson (Feenstra and Hanson 1996, 1997, 1999), and also the more recent model by Gene Grossman and Esteban Rossi-Hansberg (2008a, b). At first glance these models appear to give different results, but on closer inspection this contrast can be traced to differing assumptions, much as in the debate between Krugman and Leamer. Moreover I argue that the remaining differences between the models neatly capture the alternative experience of US manufacturing during the 1980s and 1990s, as materials offshoring has given way to services offshoring. Thus this lecture both “closes the gap” between these models and points out where they best apply in practice. I conclude the lecture by suggesting a new calculation of the factor content of trade, which enables us to overcome the aggregation bias noted by Krugman (2008) and serves to show how this Heckscher–Ohlin calculation can still be used to measure the importance of offshoring.

In lecture 2, I deal with less familiar territory—the macroeconomic implications of offshoring. My discussion there focuses on three potential implications: business cycle volatility, prices, and productivity. The material on business cycle volatility draws on my work with Paul Bergin and Gordon Hanson (Bergin, Feenstra, and Hanson 2007, 2009a, b), while the work on prices and exchange rates draws on Bergin and Feenstra (2009). Both of these topics illustrate the usefulness of microeconomic trade models to analyze macroeconomic phenomena, as has also been recognized by many other scholars in the field. It is natural to expect that the flexible production patterns inherent in the outsourcing or offshoring of tasks can lead to fluctuations across borders and, in that way, amplify volatility. If we add to this model the realistic idea that firms charge variable markups, then we also obtain a reason for trade to influence prices and exchange

rate pass-through. The third topic covered in this chapter—productivity—pertains to the measurement of productivity growth by statistical agencies. Based on joint work with Marshall Reinsdorf and Matthew Slaughter (Feenstra, Reinsdorf, and Slaughter 2008), I argue that the speedup in productivity growth in the United States during the second half of the 1990s is due in part to a terms of trade improvement. Those results are now being updated in joint work with Benjamin Mandel (Feenstra et al. 2009).

Both lectures appear in much the same form that I presented them at the Stockholm School of Economics on September 17 and 18, 2008. I wish to thank Mats Lundahl for the generous invitation to present the Ohlin Lectures, along with two reviewers who provided insightful comments on the lectures. One of those comments was to add more to the conclusions, and in particular, to suggest directions for further research. So in this manuscript I have added such a chapter, drawing on material presented at the lectures along with some new material. That final chapter deals with both empirical and theoretical results, pointing to promising new research as well as to intriguing puzzles that have not yet been addressed. It is my hope that this final chapter, in conjunction with the lectures themselves, can stimulate further inquiry on the global effects of offshoring.